

sand, beneath which there may possibly be found a bed of green sand. As the sulphate of lime exists but in a very small quantity in the sand above described, no very great hope of its proving valuable can be entertained, though it would certainly be proper to give it a trial.—Some specimens of *bog-iron-ore* of good quality were obtained at the head of a branch of Worton creek, on the farm of Mr. Levy Wroth.

SEC. II.—*Geological Examination of Cecil Co.*

The extent of Cecil county is little above 394 square miles, embracing 243,206 acres, that present the greatest variety of soils. Like all the Eastern-shore counties it is most conveniently intersected by rivers and creeks that empty into the Chesapeake, and it is connected with the Delaware by means of a canal. The topography of the lower portion of the county, S. of the Elk, is very different from that of the upper portion, which is based upon primary rocks, whereas the former consists of the usual arenaceous deposits of the ferruginous sand formation. This lower portion is divided into necks of land that merit a separate description.

Sassafrass neck, between the Bohemia and Sassafrass rivers, contains some of the best lands in the county. Its middle portions are generally level, or but gently undulating, whilst along the bay and river shores the country is broken into hills. The soil varies from a sandy to a clayey loam, in many places mixed with green particles, often highly ferruginous, and in some parts gravelly. It has been heretofore improved by plaster and clover, but it is now beginning to receive a more permanent improvement by the use of lime and *marl*. The surest and best crops that are now raised are those of corn and oats, but with the addition of lime good wheat crops have been also made. The neck is well supplied with wood and timber, consisting of the several species of oaks, hickory, chestnut, poplar, walnut, &c. Where the timber has been removed a new and vigorous growth of chesnut, walnut, and locust are observed to spring up. It is worthy of remark in reference to the soils of this section of the county, that where the light ferruginous sandy-loam soil occurs which is liable to run into gullies, it is strictly speaking productive through its whole depth—sometimes of 50 feet—; so that crops may be raised from it, even where the whole of the vegetable mould forming the soil proper of most lands, has been removed: hence, perhaps, the propriety of levelling the torn up lands with a view of converting them into arable slopes. This circumstance, it is believed, deserves to be particularly noticed whilst contemplating the means of improvement to be applied to such spots.

Bohemia Manor, lying between a river of the same name and Back creek, also presents a body of fine lands. Along the river shores, on the Bohemia, the country is hilly and gravelly, and towards its head the soil is a highly ferruginous sand containing a few green particles. The banks of Back creek, on the other hand, exhibit a stratum of